

Introduction to Kubernetes on Edge with k3s (LFS156x)

There is a growing interest in running software at the edge. This course takes a deep dive into the use cases and applications of Kubernetes at the edge using examples, labs, and a technical overview of the K3s project and the cloud native edge ecosystem.

Duration: 2 Days

Prerequisites for this course

- You should be familiar with the Linux Operating System and how to use common CLI commands to pass arguments, make use of configuration files, and to configure networking.
- A basic understanding or some prior experience with deploying applications to Kubernetes would be helpful to you.
- You will need to be able to run Docker on your computer.

Outline for this course

Chapter 1 – The Case for Edge Compute

Chapter 2 – The Edge Compute Landscape

Chapter 3 – Scaling Down and System-on-Chip Devices

Chapter 4 – K3s: What Is and Why Is It needed?

Chapter 5 – Setting Up Your Own Lab Environment

Chapter 6 – Deploying Real Workloads with the Kubernetes API

Chapter 7 – Functions at the Edge

Chapter 8 – Command & Control and Remote Access

Chapter 9 – Deployment Strategies for Applications at the Edge

Chapter 10 – Challenges with the Edge

Chapter 11 – Continue Your Journey